AMENDMENT AND REPLY
Applicants: Ronald A. MODESTO; Robert WOJCZAK; Scott KRUPP;
               Yvonne LUZNEY and Daniel LAPPI
Application No. 09/652,197
Examiner: Tung S. LAU
Page 2 of 10

1   1.   (Amended)   A part measurement system comprising:

2   a press machine including a lower die coupled to an upper die, wherein the

3   lower die includes a top surface supporting a strip of material to be formed into a part

4   after a stripper plate coupled to the upper die contacts the strip of material;

5   a part measurement sensor located in the lower die, wherein the sensor

6   measures a critical dimension of the part while the part is in the lower die;

7   a part forming rail coupled to the lower die, wherein the forming rail and

8   the upper die form the critical dimension of the part; and

9   a press controller coupled to the press machine and the sensor, wherein the

10   controller processes a measurement signal from the part measurement sensor of the

11   critical dimension of the part, compares the measurement signal to a predetermined

12   threshold value, and generates a command signal to the press machine to adjust the

13   forming rail based on the measurement signal;

14   wherein the forming rail is coupled to a servo and the press controller

15   adjusts the servo based on the measurement from the sensor of the critical dimension of

16   the part and further wherein the upper die includes a knocker that contacts the forming

17   rail to form the critical dimension of the part.

1   11.   (Amended)   A part measurement system comprising:

2   a press machine including a lower die coupled to an upper die, wherein the

3   lower die includes a top surface supporting a strip of material to be formed into a part

4   after a stripper plate coupled to the upper die contacts the strip of material;

5   a part measurement sensor located in the lower die, wherein the sensor

6   measures a critical dimension of the part;

7   a part forming rail coupled to the lower die, wherein the forming rail and

8   the upper die form the critical dimension of the part; and

9   a press controller coupled to the press machine and the sensor, wherein the

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Page 3 of 10

10   controller processes a measurement signal from the part measurement sensor of the

11   critical dimension of the part, compares the measurement signal to a predetermined

12   threshold value, and generates a command signal to the press machine to adjust the

13   forming rail based on the measurement signal;

14   wherein the forming rail is coupled to a servo and the press controller

15   adjusts the servo based on the measurement from the sensor of the critical dimension of

16   the part and further wherein the upper die includes a knocker that contacts the forming

17   rail to form the critical dimension of the part.

1   22.   (Amended)   A method of measuring a critical dimension of a part in a

2   press machine, the method including the steps of:

3   feeding a strip of material through the press machine, wherein the machine

4   includes a lower die coupled to an upper die and the lower die includes a top surface

5   supporting the strip of material;

6   forming the strip of material into the part, wherein a stripper plate coupled

7   to the upper die contacts the strip of material and the upper die punches the strip of

8   material;

9   measuring the critical dimension of the part with a part measurement

10   sensor located in the lower die;

11   processing a measurement signal from the part measurement sensor of the

12   critical dimension of the part, wherein a press controller compares the measurement

13   signal to a predetermined threshold value, and generates a command signal to the press

14   machine; and

15   adjusting a forming rail coupled to the lower die based on the command

16   signal from the press controller;

17   wherein the forming rail is coupled to a servo and the press controller

18   adjusts the servo based on the measurement from the sensor of the critical dimension of